

Note No. 003: Lawns

Guidance Notes are intended to examine the sustainability or otherwise of types of materials, products and practices currently used by designers and the landscape industry at large.

A list of pros and cons is presented, together with references where available for further reading.

No reference is made or to be inferred to any company, brand or trademark.

The SGD may make a recommendation or have a preferred position on the use or non-use of the material in question.



Introduction

Lawns have been considered a "green desert" when compared with the ecological communities that can exist within more complex and layered plantings. They have their place and function however, and are infinitely preferable to artificial lawns (see GN 001). The over-manicured, striped, irrigated and obsessively-controlled-with-plenty-of-chemicals lawn is, or should be, a thing of the past (with some sporting exceptions). There are low-input management alternatives that still give us green without huge inputs of time, fossil fuels or chemicals. In the UK, we don't need to water lawns. If they go brown in periods of drought, they soon green up again and selecting a wider range of grasses and plants, such as micro-clover, helps with resilience and biodiversity. Most importantly, research is showing that lawns are pretty good at sequestering carbon within the root-zone. Finding the right balance between ecology, carbon-time inputs and leisure becomes a matter of altering our attitudes and expectations.



Positives

Personal

- Leisure space: a lawn becomes the carpet of our outdoor room, where we relax and play
- Visual balance: lawn often holds the shape of our designs and frames the view, creating “white space” in a design
- It can be easier to mow a lawn than to tend a high-maintenance border style

Environmental

- Given minimal interference, a lawn will have an active and diverse ecology
- Lawns can be a food source for many of our native and visiting fauna
- Mixed species of low plants, to supplement grass species add diversity, such as daisies, speedwell, self-heal, buttercups and clovers
- Moss is a natural part of an ecology too
- Lawns sequester significant amounts of carbon into the soil and can become an important part of climate-mitigation

Negatives

Personal

- Traditionally managed lawns are labour and carbon intensive affairs, demanding too much time and effort in modern life
- Lawns are visually monotonous and often insufficiently offset with planting

Environmental

- Fossil-fuel use of machinery is significant on a larger scale
- Chemical controls kill off biological activity within the soil
- Irrigation consumes water resources
- Extensive lawns are less biologically diverse than an area of border/mixed planting or woodland
- In a drought period, lawns may be less able to retain and absorb water from sudden rain (depending also upon soil type)
- Compaction from heavy use damages soil structure and health



Recommendations

- If you can do without a lawn, then do so, but don't hard-pave or use artificial grass - these remove ecosystems from the garden.
 - Reduce the amount of lawn as much as possible - 20-30% of area would be a good maximum for an average garden.
 - Cut less frequently, once every two-three weeks in season. Zone areas into high or low frequency of care
 - Leave some areas of grass to grow long, with an annual/biannual cut. Introduce wild flowers and bulbs
 - Do not use chemical controls or fertilisers
 - Do not irrigate, even in drought
 - Add clover for nitrogen fixing and retaining green colour during drought
 - Be wary of RHS advice - largely traditional with undesirables-as-weeds/pests approach
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References and further reading

The following links may be useful:

<https://www.resilience.org/stories/2018-02-28/will-carbon-sequestration-redeem-the-lawn/>

Paper on lawn carbon sequestration: <https://www.ncbi.nlm.nih.gov/pubmed/23124590>

<http://www.turfgrass.co.uk/news-from-the-turf-world/carbon-grass-technology>

<https://www.theguardian.com/lifeandstyle/gardening-blog/2017/mar/29/forget-the-lawnmower-just-let-your-grass-grow>

<https://www.theguardian.com/lifeandstyle/2019/jul/20/gardens-grass-five-alternatives-to-lawn-jim-cable>

RHS advice on lawns & drought: <https://www.rhs.org.uk/advice/profile?pid=417>

<http://blogs.reading.ac.uk/grass-free-lawns/rethinking-the-traditional-grass-lawn/>

<https://www.telegraph.co.uk/gardening/gardeningadvice/10683907/Why-rolling-in-clover-is-good-for-your-lawn.html>